Group 1 Recommendations

1. Use guided inquiry to create a focused and safe environment for collaboration.
2. The inquiry process
   1. starts with a targeted question around student learning.
   2. Iteratively gathers and collects evidence (possibly with a protocol) through activities such as FIGs, CATS, classroom exchanges and common assessments.
   3. Results in ongoing changing practice.

We have the time/space for collaboration through our Reflection Fridays.

We have started an inquiry process around student retention of material, using the data from our common core finals and pretests. Our next steps are to analyze results and make changes in our teaching practice.

We have used CAT’s more on an individual basis, not as part of a large inquiry group.

We have used Classroom exchanges as a way to enhance collaborative nature of this work.

Group 2 Recommendations

1. Departmental investment in creating a curriculum which supports deeper student understanding: Faculty take control of curriculum either by re-examining course learning outcomes or using backwards design – this process is **not dictated by textbook content or other external forces** but by what we *really* want students to understand. Faculty must have a willingness to rethink or move away from the traditional curriculum. This process allows for deeper learning experiences in the classroom and a **shift in the role of faculty from lecturer to facilitator**. Students explaining their mathematical thinking becomes a powerful learning activity.

We are in support of the idea of moving away from textbook-driven curriculum; we are in the early stages. There is some natural resistance to change that we are working to overcome.

The idea of shifting from lecturer to facilitator has been welcomed among most of our faculty and we underway to making this transition. We share our experiences in this transition process at our Friday reflections.

1. Proactive leadership in the (campus) community promoting math literacy: Math faculty should be actively engaged in shaping the campus cultural perception of mathematics. Specifically, faculty should advocate the fact that no one is born “bad at math” and lead a conversation that challenges the conventional wisdom regarding what math is and how it is learned.

We are confused on the use of the term “math literacy” in this context.

We do not like the terms “conventional wisdom”, would prefer it along the lines of *conventional misunderstanding.*

We agree there should be better communication with general college advising and worker retraining advisers.

1. *Provide interested instructors at all levels (adjuncts and FT) with time, space, and support to experiment (resulting in either success or failure) without fear of repercussion.*

We agree that his is very important, and our campus has been very successful in providing this space and support

Group 3 Recommendations

1. Now we use Formative Assessments in the classroom to frequently gain information about student understanding and we use that information to decide what to do next as teachers. Formative Assessments include, but are not limited to: common cross-course and cross-section questions, group quizzes/tests, multiple drafts of complex tasks, CATS, self-assessment.

We agree that his is very important, and our faculty has incorporated the use of formative assessments in their practice.

2) As the use of Formative Assessment moves from educators tinkering in isolation to a visible part of our collective practice there is a noticeable **shift in the adaptive capacity of a department to help students be successful**. The visibility comes through participation in structured FIGS, formal lesson study, departmental initiatives using evidence-based practices, and state-wide retreats.

We are a bit confused by this language, in particular about the use of the word “*visibility*”. Unfortunately, this doesn’t quite capture the rich information captured in the poster.

Through our Friday reflections, we have been able to share our use of assessment results leading to worthwhile group discussions and decisions.

Group 4 Recommendations

1. Effective tasks were open ended, not listed with a,b,c,d to lead to the answer. Just ask the question and allow students to struggle in the practice of real problem solving. These require training, experimentation, reflection and support to create.  
   2) A skilled facilitator is clear on their goals/outcomes beyond math skills, sets expectations for process and frustration in class, engages each student, guides the inquiry but does not give answers, and encourages productive struggle. Requires training, experimentation, reflection, and support.  
     
   3) To promote contextualized tasks, adjust course outcomes and assessments to encompass the demands of contextualized tasks and real life applications. These outcomes can't just be math procedures, but rather the thinking skills to employ the math skills that they've learned in the real world.

We are in strong support of this. This gives us a clearer understanding of what an effective task is (1), and the work required to implement it well (2). Our belief in the value of contextualized tasks led to a redesign of course outcomes.

Group 5 Recommendations

1. Reallocate classroom time to make space to shift faculty role to coach from answer-machine, encourage multiple representations and strategies, and develop students’ abilities to articulate math.
2. Department-wide collaboration (such as faculty inquiry groups, exchanges and shared activity development) which enables the design of new ways to draw out student thinking, reasoning and sense making.
3. Explore and embrace research on theories of student learning with time and framework for discussion.

(1) and (2) we embrace wholeheartedly at North; we’ve been making these shifts incrementally and sharing results collaboratively. We haven’t had the time to spend reviewing research outside of RPM retreats and conferences.